

VII. *A Description of a very remarkable aquatick Insect, found in a Ditch of standing Water near Norwich, in the Spring of the Year, 1762. By Edward King, Esquire, of Lincoln's-Inn, F. R. S.*

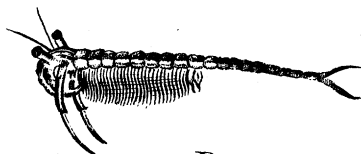
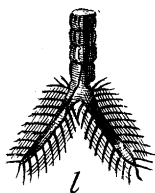
Read Feb 5,
1767.

T A B. IV. A is the female, and B the male, both represented on their backs, in the posture in which they usually swim; *a, a,* are a number of small transparent, fringed, fins, placed parallel, and contiguous to each other. They are almost always in a waving motion, and the animalcules seem to keep themselves suspended, at different heights, in the water, by means of them; for on their ceasing to move they sink to the bottom: *d* is one of those fins belonging to the female seen in front, and *b* is one of those belonging to the male, in which there is a very remarkable difference: *c* is the head of the female; and *g* is the head of the male; distinguished by three projecting substances like horns, or tusks which are marked *k* in figure B; one of the long ones on the side is drawn separate at *e*, and the crooked one in the middle at *f*; this last probably serves as a kind of trunk, and the former may be of service to catch their prey, whatever it is; *i* is a very singular projecting substance in the male, and may, perhaps, contain the parts of generation; and *h* is the ovarium of
the

A



B



the female, in which (it being quite transparent) the ova, or spawn, are very visible, and may be seen, from time to time, to change their places, and to have a kind of circulation.

C is a view of the female, placed on its back, in order to shew the position of the fins, and their appearance when one looks down upon the insect; and D is the male, placed with his back uppermost, in the posture in which he sometimes lies still at the bottom of the water. Lastly, *b* is the tail magnified in a microscope, showing the hairs which grow on both sides out of it; but as the animalcule did not lie still long enough in the water, I could not view it with a glass so exactly as I wished to do, and, therefore, am not sure of the accuracy of the drawing of this part; all the other parts I have drawn as carefully as I was able, and they are about the natural size.

In these insects, besides their form, several particulars are very remarkable. 1. Their bodies are entirely transparent, and mostly of a yellowish hue, except towards the tail, and part of the ovarium, where the color is reddish; and, through a long vessel, which reaches almost the whole way, from the head to the tail, somewhat of a circulation, by fits and starts, is very visible, even to the naked eye. 2. In the ovarium of the female, the ova (which are of a mixed color in different parts, some brown, some yellow, and some red) are also in a constant circular motion round the bag (or at least, by a deception of sight, they appear to be so). 3. They swim constantly on their backs, keeping themselves suspended by the vibrations of their numerous fins, and moving forwards, by giving a sudden spring with
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their tails; which latter circumstance is common to almost all aquatick insects.

In the ditch from whence these were taken, there were a vast multitude of the same kind, though they have not been found in any other place that I know of. From their being prolifick in this state, I suspect it to be their only one, and that they are merely aquatick, and never turn to flies, as many insects found in water do: but then it seems very unaccountable, how they came to be in such abundance in this ditch, and no where else, at least so as to be observed.

They were discovered by a poor man, now dead, whose genius was very extraordinary, and much superior to what is usually found in his rank of life. He was indefatigable in his searches after every thing curious in nature, and, without ever having had any advantages of education, had acquired a degree of knowledge by no means contemptible. He kept a great number of these insects for a considerable time, and they seemed to receive their nourishment chiefly from the water itself, or from the most minute animalcules in it; not being perceived to feed on any thing that could be taken notice of. I had several of them for some days in my custody, from which I took this drawing; and they were seen and observed by many persons.